precluded by a normal neurological examination, the only diagnosis remaining is constitutional precocious puberty.

The treatment of this disease is less than satisfactory. There is no agent available that prevents the premature closure of the distal epiphyses. Medroxyprogesterone acetate inhibits ovulation, usually prevents menstruation and may cause some regression of the secondary sex characteristics.

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REFERENCES

Brenner PF: Infancy and childhood in gynecology and obstetrics, *In* Romney SL, Gray MJ, Little AB, et al (Eds): The Health Care of Women, New York, McGraw-Hill 1980

Bidlingmaier F, Butenandt O, Knorr D: Plasma gonadotropins and estrogens in girls with idiopathic precocious puberty. Pediatr Res 11:91-94, Feb 1977

Brenner PF: Precocious puberty, chap 5, *In* Quilligan EJ (Ed): Current Therapy in Obstetrics and Gynecology, Philadelphia, W. B. Saunders & Co, 1980

Ectopic Pregnancy: Current Etiology

THE NUMBER OF MATERNAL DEATHS due to ectopic pregnancies has decreased in the last 20 years, but there has been a far greater decline in maternal deaths from abortions. As a result, ectopic pregnancy is the leading cause of maternal mortality in the first trimester of pregnancy. Reviews indicate that a significant percentage of these deaths are preventable. A half to two thirds of all women with surgically proved ectopic pregnancies are seen in a medical facility more than 24 hours before admission for surgical operation.

Pelvic inflammatory disease and pelvic surgical procedures have long been suggested as etiologic factors in ectopic pregnancy. More recently it has been noted that pregnancies following tubal surgical procedures for infertility or tubal sterilization operations, and unwanted pregnancies which occur while women are using intrauterine devices (IUD's) or progesterone-only oral contraceptives are more likely to be ectopic. Conservative infertility operations to restore tubal patency result in an increased proportion of tubal pregnancies particularly with surgical procedures involving the distal portion of the tube. Ectopic pregnancy has been reported following both tubal ligation and tubal fulguration sterilization procedures. A previous history of tubal occlusion for sterilization does not exclude the possibility of ectopic gestation, and as these procedures are more frequently selected by family planning acceptors they will play an increasing role in the cause of ectopic pregnancy. Users of intrauterine devices have protection against both intrauterine pregnancies, and tubal pregnancies but the IUD is more effective in preventing intrauterine pregnancies than extrauterine gestations. Therefore, an unwanted pregnancy in an IUD user is more likely to be an ectopic gestation than is a pregnancy in women using barrier methods of contraception or no method of contraception at all. Progesterone-only oral contraceptives are associated with a 2 percent to 8 percent failure rate and the ratio of extrauterine to intrauterine gestations is increased compared with a population of noncontraceptive users.

A past history of pelvic operation either to restore tubal patency or to produce tuba occlusion and a contraceptive history indicating the present use of an IUD or the progesterone-only oral contraceptives increase the likelihood that a pregnancy will be an extrauterine gestation.

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REFERENCES

Brenner PF, Roy S, Misheel DR Jr: Ectopic pregnancy—A study of 300 consecutive surgically treated cases. JAMA 243:673-676, Feb 15, 1980

Brenner PF, Benedetti T, Misheel DR Jr: Ectopic pregnancy following tubal sterilization surgery. Obstet Gynecol 49:323-324, Mar 1977

Ambulatory Gynecologic Operations

AMBULATORY OPERATIONS, meaning any surgical procedure done without an overnight hospital stay, are now firmly established as a safe, economical and reimbursable mode of surgical practice. It is estimated that from 30 percent to 40 percent of gynecological operations that have traditionally been carried out with admission to hospital could now be done in suitable *come-and-go* facilities, with excellent care, and with significant savings in physician time and patient costs.

Suitable facilities for ambulatory gynecologic surgical operations are of three basic types: The hospital *come-and-go,* the freestanding surgical center and the office-based surgical suite. The hospital based *come-and-go* surgery has the advantage of immediate hospital backup in case of unanticipated need; established standards are easier to monitor but savings tend to be less. Freestanding surgical centers generally maintain high quality standards of care, general anesthesia capability and overall costs which are lower than hospital-based centers. The office-based surgical suite has the greatest potential for cost effectiveness, but also the furthest to go in establishing and monitoring quality standards of care. In general, operations that can be carried out with local anesthesia, such as dilation and curettage, are appropriate for an office-based surgical suite. Operations for which general anesthesia is preferred, such as laparoscopy and minilapa-